

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/732,788
Attorney Docket No. Q62242

REMARKS

Claims 1 and 2 have been examined. Claims 3-5 have been added. Therefore, claims 1-5 are pending in the present application.

I. Drawings

Enclosed herewith, Applicant submits a Submission of Corrected Drawings, including corrected Figures 4A and 4B, which are designated as "PRIOR ART". Applicant submits that these Corrected Drawings obviate the informalities noted in Paper No. 5, mailed on April 2, 2002. As such, Applicant requests the Examiner to indicate that the corrected drawings have been received and approved in the next Patent Office correspondence.

II. Claim Rejections based on Prior Art Grounds

To summarize, the Examiner rejects claims 1 and 2 under 35 U.S.C. § 102(b) as being anticipated by Richardson (U.S. Patent No. 4,204,896). Additionally, the Examiner rejects claims 1 and 2 under 35 U.S.C. § 102(b) as being anticipated by Birchler et al (U.S. Patent No. 4,043,027). Further, the Examiner rejects claims 1 and 2 under 35 U.S.C. § 102(b) as being anticipated by Saito (U.S. Patent No. 4,620,711). Moreover, the Examiner rejects claims 1 and 2 under 35 U.S.C. § 102(b) as being anticipated by Davis et al (*Applied Plastic Product Design*, Prentice-Hall 1946, page 74). Applicant's remarks on the individual rejections are as follows.

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A. Anticipation Rejection based on Richardson

As set forth above, the Examiner rejects claims 1 and 2 under 35 U.S.C. § 102(b) as being anticipated by Richardson. For at least the following reasons, Applicant traverses this rejection.

As a preliminary matter, Applicant amends claims 1 and 2 to make minor editorial changes to conform with U.S. Practice.

The Examiner alleges that Richardson discloses a lower mold 3 having an inner space provided with vertical side faces 6 (see Office Action, page 2, numbered paragraph 3). Additionally, in the Response to Arguments, the Examiner takes the position that Richardson discloses a lower mold having a bottom face and vertical side surfaces (see Office Action page 4, numbered paragraph 8). Applicant respectfully submits that the Examiner is mischaracterizing Richardson; and therefore, the anticipation rejection of Richardson is improper.

Contrary to the Examiner's position, Richardson does not disclose vertical side faces 6 defining a lower part of the molded cavity. Instead, Richardson discloses a substantially cylindrical mold cavity 4, as shown, for example, in Figures 3, 7, and 8 (see also, column 2, lines 39-42). That is, the inner space provided by the molding cavity has a *cylindrical shape* (i.e., the mold cavity does not have vertical side faces, as alleged by the Examiner). Applicant notes that, in Richardson, the vertical side portions 6 (compared by the Examiner to be claimed vertical side faces) are part of the upper mold half, as shown in Figure 3. However, the side portions 6 do not define a part of the *mold cavity*. On the contrary, the inner face of the mold cavity of Richardson

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is substantially cylindrical. Instead, the side portions 6 merely engage the opposing wall of the lower mold 3, as shown in Figure 3 of Richardson.

In comparison, claim 1 recites, *inter alia*, “a lower mold having an inner space provided with vertical side surfaces and a bottom face, which defines a lower part of the molding cavity.” It is settled law that, to anticipate a claim, the applied reference must disclose all of the features of the claim in as complete detail as recited in the claim. Therefore, since the molding cavity of Richardson is substantially cylindrical, Applicant submits that Richardson clearly does not disclose or suggest all of the recitations of independent claim 1. Accordingly, Applicant requests the Examiner to withdraw the § 102 rejection of independent claim 1.

Additionally, with respect to dependent claim 2, the Examiner takes the position that Richardson discloses a dome-shaped ceiling face of the upper mold having a curvature 7 “for forming a curvature of an outer face of the joint” (see Office Action, page 2, numbered paragraph 3). However, Applicant submits that claim 2 does not recite this feature. Instead, claim 2 recites, *inter alia*, “wherein the dome-shaped ceiling face of the upper mold *has a curvature that is coincident with a curvature of an outer face of the terminal fitting*”. As such, Applicant submits that Richardson also does not disclose or suggest all of the recitations of dependent claim 2; and therefore, claim 2 is separately and independently patentable over Richardson.

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B. Anticipation Rejection based on Birchler

Additionally, as set forth above, the Examiner rejects claims 1 and 2 under 35 U.S.C. § 102(b) as being anticipated by Birchler. For at least the following reasons, Applicant traverses this rejection.

The Examiner takes the position that Birchler discloses a lower mold 60 having vertical side faces (both sides of the cavity 64) and a bottom face 65 which defines a lower part of the molding cavity. Applicant respectfully submits that the Examiner is mischaracterizing Birchler. For example, as shown in Figure 5 of Birchler, the lower mold 60 defines an inner space with a bottom face 65 and *curved side faces*, not *vertical side faces*. As such, Applicant submits that Birchler neither discloses nor suggests all of the recitations of claim 1.

For example, claim 1 recites, *inter alia*, “a lower mold having an inner space provided with vertical side faces and a bottom face, which defines a lower part of the molding cavity.” In particular, Applicant notes that, by providing the lower mold with a cross-sectional shape with vertical side faces and a bottom face, appropriate frictional force can be obtained between the vertical side wall surface on each side of their lower mold and a casting surface of the molding resin after coiling and curing. Thus, the upper mold can be removed from the terminal connecting portion while the terminal connecting portion remains in the lower mold, due to the frictional force between the vertical sidewall surface on each side of the lower mold and the casting surface of the molding resin. As such, the operator is able to release and remove the molded terminal connecting portion, which is retained in the lower mold, without difficulty and using a natural posture.

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For at least the foregoing reasons, Applicant submits that Birchler neither discloses nor suggests all of the recitations of independent claim 1, and therefore, requests the Examiner to withdraw the § 102 rejection of independent claim 1.

Additionally, with respect to dependent claim 2, Applicant notes that the Examiner has not set forth or addressed how Birchler discloses the features of Applicant's claim 2. Therefore, Applicant submits that the anticipation rejection of claim 2 is improper, and therefore, the rejection of claim 2 should be withdrawn. Furthermore, Applicant submits that claim 2 is patentable over Birchler at least by virtue of its dependency from claim 1.

C. Anticipation Rejection based on Saito

Furthermore, the Examiner rejects claims 1 and 2 under 35 U.S.C. § 102(b) as being anticipated by Saito. For at least the following reasons, Applicant traverses this rejection.

In the present Office Action, the Examiner takes the position that Saito discloses a lower mold 1 having an inner space provided with vertical side faces (both sides 15, 17 along the cavity 7) and a bottom face (7a, the bottom of the cavity 7) (see Office Action, page 3, numbered paragraph 5). However, Applicant respectfully submits that the Examiner is mischaracterizing the Saito reference. For example, Saito does not disclose vertical side faces along the cavity, as alleged by the Examiner. Instead, the reference numerals 15 and 17 merely define curved surfaces of a cavity 7 that have *tapered surfaces*, not *vertical faces*. As shown in Figure 1, for example, the cross-section of Saito does not include vertical side faces. On the contrary, Saito simply discloses a mold for forming waterproof cables having a "drum-like" shape that is

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enlarged at a substantially central portion along the wiring inserting direction (see column 1, lines 22-23).

In comparison, claim 1 recites, *inter alia*, “a lower mold having an inner space provided with vertical side faces and a bottom face, which defines the lower part of the molding cavity”. Therefore, Applicant submits that Saito neither discloses nor suggests all of the recitations of Applicant’s claim 1; and therefore, the rejection of independent claim 1 should be withdrawn.

Additionally, Applicant submits that claim 2 is separately and independently patentable over Saito. For example, the Examiner alleges that Saito discloses that the dome-like ceiling face of the upper mold has a curvature so selected as to be coincident with a curvature of an outer face of a terminal fitting. In particular, the Examiner cites the *drum-like* portion 39, which is described at col. 4, lines 4-10, of Saito. Applicant respectfully submits that the Examiner is mischaracterizing Saito. That is, Saito merely discloses a *drum-like* portion, but does not mention whether the *drum-like* portion is coincident with any other feature, let alone coincident with the outer face of a terminal fitting. In fact, Saito does not even disclose a terminal fitting.

In comparison, claim 2 recites *inter alia* “wherein the dome-shaped ceiling face of the upper mold has a curvature which is coincident with the curvature of an outer face of the terminal fitting”. Thus, Saito clearly does not disclose or suggest at least this recitation; and therefore, claim 2 is separately and independently patentable over Saito.

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D. Anticipation Rejection based on Davis

Additionally, the Examiner rejects claims 1 and 2 under 35 U.S.C. § 102(b) as being anticipated by Davis. For at least the following reasons, Applicant traverses this rejection.

The Examiner takes the position that Davis discloses all of the features of the claimed invention. However, as best Applicant can understand from the single page excerpt of Davis, Davis does not disclose an apparatus for waterproofing a terminal connecting portion of a sheathed wire, in which a terminal fitting and a bared conductor of the sheathed wire are connected with each other, by molding with resin, as recited in claims 1 and 2. Instead, Davis simply describes a mold for forming a solid plastic part, which has a predetermined shape and is continuously exposed to water. That is, Davis does not relate, at all, to an apparatus for waterproofing a terminal connecting portion of a sheathed wire. In fact, Davis does not even mention a terminal connecting portion or even a sheathed wire. Accordingly, Applicant submits that Davis clearly does not disclose or suggest all of the recitations of claims 1 and 2; and therefore, requests the Examiner to withdraw the § 102 rejection of claims 1 and 2.

III. New Claims

Additionally, Applicant adds new claims 3-5 to provide more varied protection for the present invention. Applicant's note that, the subject matter of new claims 3-5 is disclosed, for example, in the specification on page 6, last full paragraph. Applicant submits that claims 3-5 separately and independently are patentable over any combination of the applied references.

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IV. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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